

Regulatory Unit

Monthly Performance Report

May 2000

**Office of Safety
Regulation of the
TWRS
Privatization
Contractor**

**July 2000
Environmental Management
Performance Report Submittal**

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EXECUTIVE OVERVIEW

EXECUTIVE SUMMARY

In May the Regulatory Unit (RU) focused on its readiness to receive the early sections of the Contractor's Construction Authorization Request (CAR) and on completing preparations for transition to Part B-2 of the Contract, including construction. At the time the decision was made to terminate the BNFL Contract, the RU was fully prepared for transition as confirmed by an External Independent Review team.

The decision to terminate the BNFL Contract raised numerous issues concerning the details of the regulatory process to be applied to the follow-on Contractor(s). In the interest of conserving financial resources and reducing the magnitude of the delays that could follow this decision, EM-1 has directed that the regulatory framework and associated standards-setting process be applied to all contractors engaged in the proposed waste treatment plant activities. Further, the RU will continue to function as an entity independent of the ORP.

Major RU activities during May included:

- issuing an inspection report that assessed the BNFL Self-Assessment and Corrective Action Programs (IR-00-004);
- issuing an inspection report that assessed the independence of the Quality Assurance (QA) Organization (IR-00-005);
- reviewing the BNFL Part B-1 Facility and Process Design Deliverables;
- conducting a topical meeting on Implementation of Integrated Safety Management (ISM) Cycle 2;
- completing the acceptability review of the BNFL Radiation Protection Plan (RPP) for Design and Construction;
- continuing the review of the BNFL Non-radiological Worker Safety and Health Plan;
- issuing a report on the effectiveness of BNFL's implementation of its Integrated Safety Management Plan (ISMP);
- completing a self-assessment of the RU's Readiness-to-Proceed into Part B-2 of the RPP-WTP Contract; and
- supporting an assessment by an External Independent Review (EIR) Team of DOE Readiness-to-Proceed into Part B-2 of the RPP-WTP Contract.

These significant items, and other notable accomplishments, are detailed below.

MONTHLY HIGHLIGHTS

Inspection of the BNFL Inc. Self-Assessment and Corrective Action Programs

The RU issued inspection report IR-00-004 that assessed the BNFL Inc. (BNFL) self-assessment and corrective action programs. Three Findings with multiple examples were identified:

- problem identification and corrective action (quality improvement) procedures were not adequate to describe and control the processes necessary to ensure an effective quality improvement program;
- implementation of corrective actions for identified deficiencies was not timely (twelve examples of failure to address deficiencies in a timely manner were identified); and

- quality improvement procedures were not being followed (three examples were identified regarding failure to write a Corrective Action Report when a Deficiency Report (DR) was designated as significant).

The Findings described above were of significant concern because the BNFL quality improvement program (problem identification and corrective action) was not being effectively implemented. Inspection results indicated that, in the past, management was not providing appropriate support to the quality improvement program to ensure that problems were being addressed in a timely manner. Also, staff was not applying appropriate priority to quality improvement related activities and was found, in general, to have little knowledge of the program. BNFL was requested to provide a written response to the Findings within 30 days, in accordance with the instructions provided in the Notice of Finding.

Inspection of the Independence of the BNFL Inc. Quality Assurance Organization

The RU issued special inspection report IR-00-005 that assessed the independence of the QA Organization. Two Findings (documented in a Notice of Finding) were identified:

- The Project QA Manager did not have sufficient organizational freedom as indicated by the reassignment of the Project QA Manager by the General Manager, even though the Project QA Manager reported directly to the Corporate QA Manager and not the General Manager; and,
- The Project QA Manager presented a Stop Work Order to the Deputy Project Manager. However, the Deputy Project Manager did not consider the Stop Work Order appropriate, did not stop work, and did not appeal the action to the BNFL Corporate QA Manager, as required by procedures.

Additionally, the inspectors observed the reassignment of the Project QA Manager by the General Manager had a chilling effect on some BNFL Inc. employees in that they indicated they would be reluctant to take potential safety issues to management due to concern about retaliation.

These Findings and Observation are the most significant programmatic issues identified to date by RU inspection of BNFL Inc. The Findings have some similarity to those that were reported by the regulators at the BNFL Sellafield site. BNFL was requested to provide a written response to the Findings and the Observation within 30 days, in accordance with the instructions provided in the Notice of Finding.

Review of the BNFL Part B-1 Facility and Process Design Deliverables

At the request of the Office of River Protection (ORP), the RU completed its review of BNFL's Part B-1 Facility and Process Design Deliverables. The RU review team was comprised of RU staff, RU contractors, and U.S. Nuclear Regulatory Commission (NRC) staff of the Special Projects Branch.

The RU reviewers determined that the Contractor facility and process design documents were not at a level of detail required to support the Hazards Analysis Report (HAR) or the Preliminary Safety Analysis Report (PSAR). In the absence of the required information regarding which standards BNFL had invoked, it was not possible to determine if the design achieved adequate safety. Additional design information required to support the Construction Authorization Request (CAR) included further development of the design integrated

with identification of items that have been determined important to safety. The reviewers noted that the time required to develop this information could impact the schedule for future regulatory submittals.

Topical Meeting on the Implementation of Integrated Safety Management (ISM) Cycle 2

The subject of the May Topical Meeting between BNFL and the RU was Implementation of Integrated Safety Management (ISM). BNFL described the design basis for ISM and the process they were using to implement ISM in the design of their Pre-Treatment, High-Level Waste, and Low Activity Waste facilities. Using examples for all three facilities, BNFL described the ISM process of selecting preliminary hazards, controls, Design Basis Events (DBEs), and the resulting design standards. The ISM process resulted in identification of multiple DBEs for each of the three facilities, and the identification of controls and standards to mitigate the consequences from such events.

While BNFL presented numerous examples of how they had applied ISM, the RU expressed concern that the Contractor may not have fully adhered to its ISM design guide for several parts of the ISM process. Specifically, the presentation did not provide an adequate demonstration of application of the ISM design guide to selection of DBEs and implementing standards. Based on these concerns, the RU requested that BNFL present additional information relative to selection of DBEs, establishment of design requirements from the DBEs, and selection of implementing standards at the June Topical Meeting.

The RU also requested for the June Topical Meeting that BNFL address all of the remaining open issues from the previous Topical Meetings to bring closure to as many of the open issues as possible leading up to submittal of their CAR (expected in early calendar year 2001). The June Topical Meeting is the next to last topical meeting scheduled for Part B-1.

Acceptability Review of the BNFL RPP for Design and Construction

The RU completed its acceptability review of the BNFL RPP for Design and Construction. During the one-week acceptability review, the RU determines if the submittal includes the contract-required material and if the scope of the material is sufficient to conduct a detailed review. The RU determined the document was not acceptable for continued (detailed) review. The acceptability review determined that the scope of some of the submittal was insufficient. When notified of the deficient scope, BNFL withdrew the submittal.

Review of the BNFL Non-radiological Worker Safety and Health Plan

The RU continued its review of the BNFL Non-radiological Worker Safety and Health Plan that defines the BNFL construction safety program. The RU has issued two sets of questions. The question sets incorporated Occupational Safety and Health Administration, Region 10 comments on the Plan. BNFL and the RU discussed the questions and potential acceptable responses. The RU has completed a draft evaluation of the Safety and Health Plan, pending receipt of responses to the RU's questions.

ISMP Assessment Report

The RU issued a report that documented the results of an assessment of the implementation of BNFL's ISMP. The report reflects aggregation of information from six inspections, nine design review reports, the RPP evaluation report, the QA Program and Implementation Plan evaluation report, three safety evaluations for authorization basis amendments, and observation of Contractor ISM Cycle II Reviews.

The RU found that, for the most part, the Contractor was adequately implementing its ISMP in a manner that was compatible with DOE P 450.4. However, in the area of authorization basis maintenance, the Contractor did not effectively allocate resources, clearly define the work, or perform the work within established controls. Furthermore, the lack of procedural adherence was a common problem, generally, for design-related work. The lack of adherence to the Contractor's hazard analysis procedures resulted in concern that the hazards analysis for the upcoming Construction Authorization Request (CAR) submittal may be unacceptable. Moreover, the Contractor's authorization basis maintenance procedures did not adequately identify and prioritize specific tasks, operations, or work items

Self-assessment of the RU's Readiness-to-Proceed into Part B-2 of the RPP-WTP Contract

The RU performed a self-assessment to determine if management systems and processes were in place to accomplish assigned regulatory functions. The self-assessment examined ten areas of interest against specific review criteria. The team reviewed project documents and interviewed personnel from the RU and its support contractors, U.S. Department of Energy Richland Operations, Office of River Protection (ORP), DOE-Headquarters, the NRC, and BNFL Inc.

In general, the team concluded that the RU management systems and processes were in place to accomplish the RU's responsibilities during Part B-2 and that the RU was effectively managing the regulatory program. In particular, the RU was accomplishing its regulatory responsibilities as outlined in the Regulatory Plan, which defines implementation of the Policy and the Memorandum of Agreement. In all, 20 recommendations for improvement were summarized in the report. It should be recognized that the recommendations offered were for a program that overall was working well and thus were offered in the spirit of make the RU even more effective.

EIR Team Assessment of DOE Readiness-to-Proceed into Part B-2

The RU supported the EIR Team, a Congressionally chartered and funded group of senior industry managers, in its assessment of DOE's readiness to proceed with Part B-2 of the RPP-WTP Contract. The EIR Team concluded that the RU was ready to proceed into Part B-2 and identified no concerns associated with the safety regulation of the RPP-WTP by the Regulatory Unit. The EIR Team also concluded that with the change in project approach, the recent decision to terminate the BNFL Inc. contract might impact the regulatory regime. The EIR Team recommended that DOE provide a stable nuclear regulatory environment, which included independent standards-based regulation.

While the EIR Team concluded that the area of Nuclear Regulation was ready to proceed with Part B-2, the

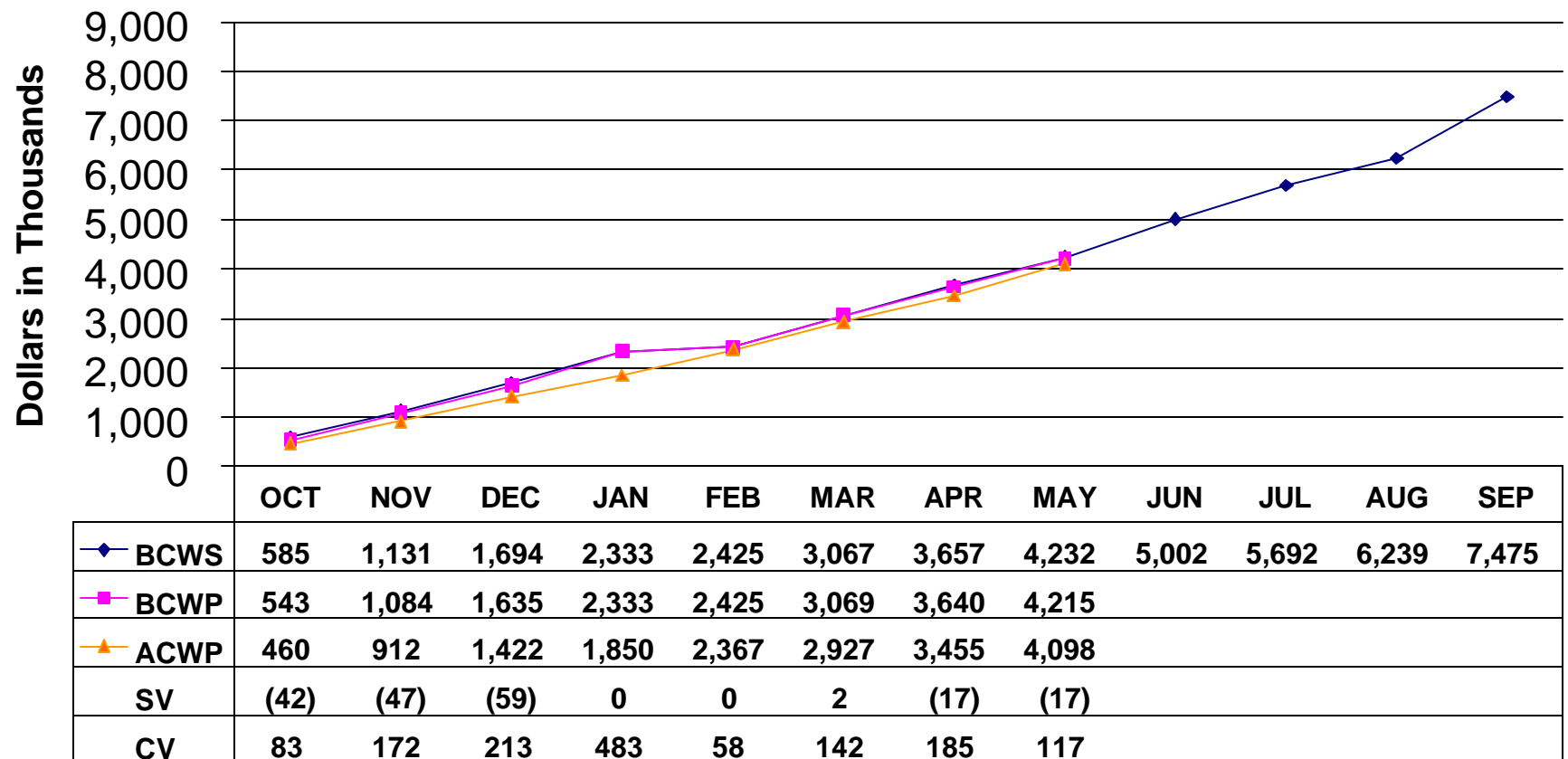
Team determined the areas of Project Management, Business and Finance, and Contracting had significant deficiencies. They noted that ORP was facing significant challenges in being ready to proceed by August 2000, even if an acceptable bid had been submitted.

Quarterly Briefing

The Regulatory Official met with representatives of DOE Headquarters in Washington D.C. to present the 14th quarterly briefing of regulatory activities in support of the BNFL TWRS-P Waste Treatment Plant (WTP). Topics presented included the following:

- Schedule of Safety Deliverables
- EIR
- RU review of B-1 deliverables
- Results of Topical Meetings held with BNFL
- ISM Cycle 2 status
- Status of the Inspection Program
- Authorization Basis Alignment
- Implementation of the IH&S Program

No actions resulted from the briefing.

COST PERFORMANCE (Graph)**Regulatory Unit Cost Performance**

COST PERFORMANCE SUMMARY

The fiscal year-to-date cost through May reflects a favorable cost variance of \$119K. This variance is a result of lower than anticipated costs associated with Authorization Basis Maintenance, Topical Issue Resolution, development of CAR Review handbooks, and Inspection Oversight Guidance. The RU's current baseline reflects an approximate \$900K scope deferral into FY 2001 as documented in approved Change Request RU-2000-007. All activities are currently performing on or are very close to the baseline schedule.

NEAR-TERM LOOK AHEAD

Planned Due Date

June

- Issue LCA Review Handbook 6-13-00
- Commence Review of BNFL LCA Request 6-26-00
- Commence Review of BNFL QAPIP 6-26-00
- Conduct Topical Closeout Meeting 6-27-00
- Issue Revised Openness Plan 6-30-00
- Issue SAP Review Handbook 6-30-00

July

- Begin review of Contractor's resubmitted RPP for Design and Construction 7-10-00
- Conduct QA Inspection 7-17-00
- Issue ER on BNFL IH&S Program Description 7-21-00
- Conduct Topical Meeting on Seismic PRA 7-25-00

August

- Conduct ALARA Inspection 8-07-00
- Present 15th Quarterly Briefing to Headquarters 8-17-00
- Issue QA Inspection Report 8-18-00

PROGRAM PERFORMANCE OVERVIEW

PERFORMANCE SUMMARY (Chart) – Program Direction and Program Support

		DOLLARS IN \$000's					FY 2000		
		BCWS	BCWP	ACWP	SV	CV	BAC	EAC	Delta
RU1	Program Management								
	<i>Program Direction</i>	\$947	930	972	(17)	(\$42)	\$1,462	1,495	(\$33)
	<i>Program Support</i>	1,032	1,032	1,023	0	9	1,656	1,605	51
	Total RU1 -----	1,979	1,962	1,995	(17)	(33)	3,118	3,100	18
RU2	Regulatory Policy & Practices								
	<i>Program Direction</i>	92	92	101	0	(9)	143	152	(9)
	<i>Program Support</i>	247	247	228	0	19	410	352	58
	Total RU2 -----	339	339	329	0	10	553	504	49
RU5	Recurring Safety Reviews								
	<i>Program Direction</i>	280	281	243	1	38	435	385	50
	<i>Program Support</i>	865	864	818	(1)	46	1,406	1,334	72
	Total RU5 -----	1,145	1,145	1,061	0	84	1,841	1,719	122
RU6	Construction Authorization								
	<i>Program Direction</i>	83	83	62	0	21	243	239	4
	<i>Program Support</i>	93	93	84	0	9	402	370	32
	Total RU6 -----	176	176	146	0	30	645	609	36
RU9	Oversight & Inspections								
	<i>Program Direction</i>	174	174	174	0	0	279	285	(6)
	<i>Program Support</i>	363	363	334	0	29	598	605	(7)
	Total RU9 -----	537	537	508	0	29	877	890	(13)
RU10	Special Projects								
	<i>Program Direction</i>	\$9	9	9	0	\$0	\$9	9	\$0
	<i>Program Support</i>	47	47	50	0	(3)	432	226	206
	Total RU10 -----	\$56	56	59	0	(\$3)	\$441	235	\$206
Total Regulatory Unit Program									
	<i>Program Direction</i>	\$1,585	1,569	1,561	(16)	\$8	\$2,571	2,565	\$6
	<i>Program Support</i>	2,647	2,646	2,537	(1)	109	4,904	4,492	412
	Total RU Program -----	\$4,232	4,215	4,098	(17)	\$117	\$7,475	7,057	\$418

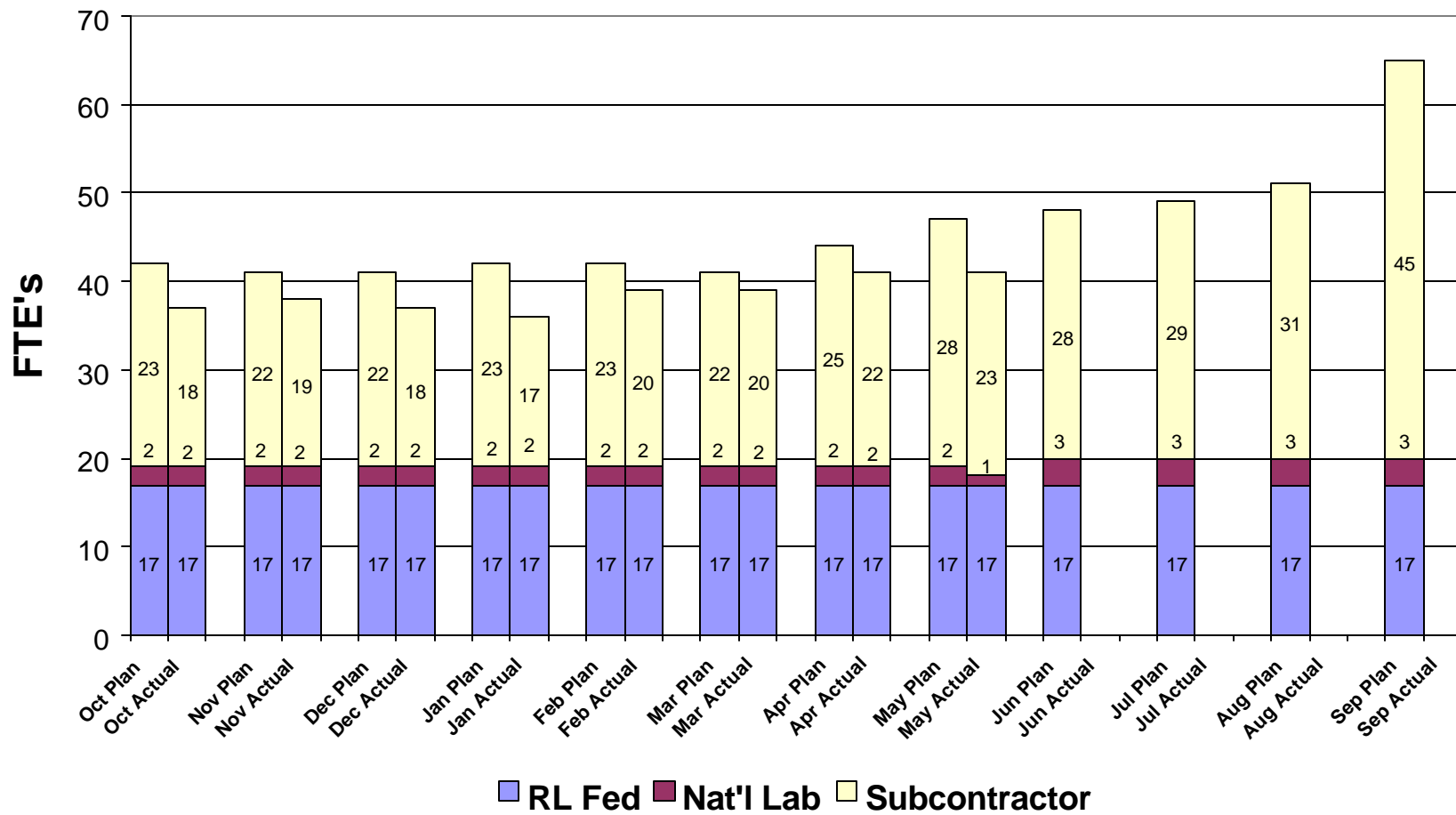
MILESTONE CONTROL LOG

MILESTONE CONTROL LOG							
MILESTONE		WBS	MILESTONE DESCRIPTION	BASELINE COMPLETION DATE	SCHEDULE STATUS	FORECAST COMPLETION DATE	ACTUAL COMPLETION DATE
TYPE	NUMBER						
<u>FISCAL YEAR 2000</u>							
RL	00-010	RU902	Standards Selection Inspection rpt issued	10/12/99	Complete	10/06/99	10/06/99
RL	00-011	RU902	Authorization Basis Inspection rpt issued	11/08/99	Complete	12/13/99	12/13/99
RL	00-012	RU902	Safety Integration Inspection rpt issued	12/07/99	Complete	12/03/99	12/03/99
FO	00-013	RU203	IH&S Plan issued	5/10/00	Complete	5/10/00	5/10/00
FO	00-015	RU205	Revised Interface Plan issued	1/31/00	Complete	1/28/00	1/28/00
RL	00-016	RU902	Design Process Inspection rpt issued	2/14/00	Complete	2/08/00	2/08/00
RL	00-017	RU902	Employee Concerns Program Inspection rpt issued	3/13/00	Complete	3/10/00	3/10/00
RL	00-018	RU902	Training & Qualifications Inspection rpt issued	4/07/00	Complete	4/05/00	4/05/00
RL	00-019	RU608	SAP Rvw Handbook issued	7/31/00	On Schedule	7/31/00	
RL	00-027	RU608	Initiate Review of SAP	9/01/00	On Schedule	9/01/00	
RL	00-020	RU605	LCA Rvw Handbook issued	6/16/00	Ahead	6/13/00	
FO	00-004	RU502	ER & Approval of QAPIP Rev. 6 issued	9/22/00	On Schedule	9/22/00	
RL	00-014	RU902	Standards Implementation Inspection rpt issued	9/29/00	TBD	TBD	
RL	00-026	RU605	Initiate Review of LCA Request	6/27/00	On Schedule	6/27/00	
FO	00-002	RU204	Openness Plan Rev. 3 issued	6/30/00	On Schedule	6/30/00	
RL	00-021	RU902	QA Inspection rpt issued	7/28/00	Behind	8/18/00	
RL	00-022	RU602	CAR Rvw Handbook issued	8/09/00	Behind	9/29/00	
FO	00-023	RU502	Approval of RPP Rev. #3 issued	9/01/00	On Schedule	9/01/00	
RL	00-024	RU902	Corrective Actions Inspection rpt issued	5/30/00	Complete	5/31/00	5/31/00
RL	00-025	RU902	ALARA Inspection rpt issued	9/11/00	On Schedule	9/11/00	

MILESTONE CONTROL LOG							
MILESTONE		WBS	MILESTONE DESCRIPTION	BASELINE COMPLETION DATE	SCHEDULE STATUS	FORECAST COMPLETION DATE	ACTUAL COMPLETION DATE
TYPE	NUMBER						
FO	00-003	RU102	FY 2001 PMP issued	9/29/00	On Schedule	9/29/00	

FULL-TIME EQUIVALENCY PROFILE (Graph)

Regulatory Unit FTE Profile



CHANGE CONTROL STATUS LOG

Regulatory Unit FY 2000 Change Control Log							
CIN#	Change Classified.	Author	WBS#	Date Change Originated	Change Request Explanation	CEB Review Date	CEB Disposition
00-001	I	K.D. Grindstaff	1.10	11/99	Processing of the FY 1999 Carryover into FY 2000 Baseline and Realignment of FY 2000 Cost Savings to Emergent Priority Workscope.	11/24/99	Approved
00-002	II	K.D. Grindstaff	1.10	12/99	Added new emergent workscope associated with impact risk balancing between TWRS and the TWRS-P facility.	12/03/99	Approved
00-003	III	K.D. Grindstaff	1.10	1/00	Redistributed funds associated with a task package titled Other Direct Cost (0424ODC).	01/18/00	Approved
00-004	II	K.D. Grindstaff	1.10	1/00	Renamed Cost Account RU1002 from K Basin SAR to Misc. RU Reg. Activities and separated the CAP into three tasks; K Basin SAR, RL Quality Assurance Program Plan, and WIPP Reg. Program Development.	01/20/00	Approved
00-005	I	K.D. Grindstaff	1.10	2/00	Implemented the most recent resource/activity planning effort, utilizing the Project's FYTD cost savings. Mid-year rebaselining effort.	02/25/00	Approved
00-006	II	K.D. Grindstaff	1.10	5/00	Initiated the detailed review of the BNFL process and facility design, which will provide the RU a current understanding of the BNFL process and facility design.	05/02/00	Approved
00-007	I	K.D. Grindstaff	1.10	5/00	Aligned the RU to the latest BNFL schedule delay prior to the decision to terminate the BNFL Hanford Contract.	5/30/00	Approved